



R22 Regulation **Subject code: 4P5AF**
TKR COLLEGE OF ENGINEERING AND TECHNOLOGY
 (Autonomous, Accredited by NAAC with 'A+' Grade)
B.Tech V Semester Regular Examinations, December 2024

SOLID AND HAZARDOUS WASTE MANAGEMENT
(CE)

Maximum Marks: 60

Date: 06.01.2025

Duration: 3 hours

- Note:**
1. This question paper contains two parts A and B.
 2. Part A is compulsory which carries 10 marks. Answer all questions in Part A.
 3. Part B consists of 5 Units. Answer any one full question from each unit.
 4. Each question carries 10 marks and may have a, b, c, d as sub questions.

Part-A		CO	Bloom Tx
All the following questions carry equal marks (10X1M=10 Marks)			
1.a)	List out the types of solid wastes?	1	L1
b)	Write the composition of domestic waste?	1	L1
c)	Classify the solid waste based on sources?	2	L1
d)	What is the importance of waste separation?	2	L1
e)	Write about handle hazardous waste?	3	L1
f)	What is TCLP Tests?	3	L1
g)	Define radioactive waste?	4	L1
h)	Write down Radiation standards?	4	L1
i)	What is E waste?	5	L1
j)	State the responsibilities of industries towards reduction of E- waste?	5	L1
Part-B			
Answer All the following questions (5X10M=50Marks)		CO	Bloom Tx
2	Write a detailed note on the characteristics, sources and problems arising from mining and industrial waste. [10M]	1	L2
OR			
3	Discuss the importance of public awareness and role of NGOs in effective solid waste management. [10M]	1	L2
4(a)	Explain about the requirements and the design concepts of transfer stations. [5M]	2	L2
4(b)	Explain various unit operations adopted for separation and transformation of solid waste? [5M]		L2
OR			
5	Explain the stepwise design and operation concepts of landfill as a disposal method? [10M]	2	L2
6(a)	Write detailed note on the nuisance caused by garbage loaded open trucks on highway? [5M]	3	L2
6(b)	Discuss the methods of waste collection system? [5M]		L2
OR			

7	Explain the storage and handling of hazardous wastes? [10M]	3	L2
8(a)	What are the various method of sanitary landfill? Explain. [5M]	4	L2
8(b)	Discuss in detail about sources treatment and disposal methods of Hazardous waste? [5M]		L2
	OR		
9	With suitable example, explain the process and disposal of Biomedical waste? [10M]	4	L2
10	Discuss in detail the effect of E-waste on the environment. [10M]	5	L2
	OR		
11	Write a detailed note on regulatory aspects of E-waste management? [10M]	5	L2